

WEASEL, FERRET, & MARTEN 2D Tube Nozzles

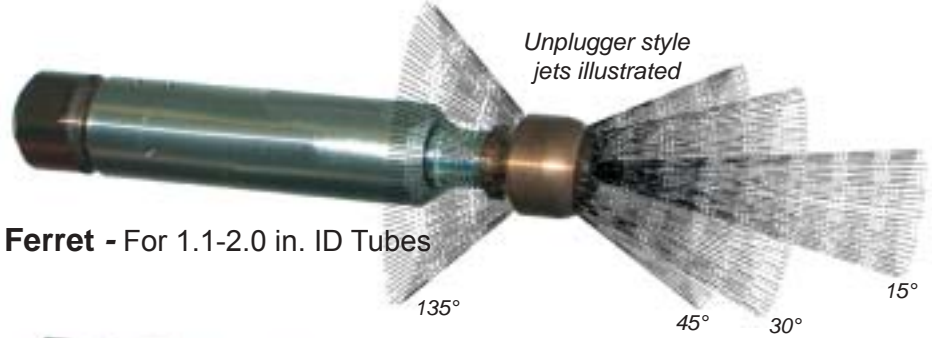
Concentrated cleaning power with controlled rotation in a compact 2D nozzle

These powerful tube nozzles are used to unplug and descale straight heat exchanger tubes, and other similar conduits. Their no-leak seal, unique jet design, and patented rotation speed control mean better restoration of heat transfer surfaces, and quicker turnaround, with less work. Replace your old fashioned tools with controlled rotation tube nozzles and stop all that exhausting hose manipulation!

Discuss maintenance kits with us when ordering because these nozzles require some attention every shift for continued reliable service.



Marten - For 1.5-3.0 in. ID Tubes



Ferret - For 1.1-2.0 in. ID Tubes



Weasel - For .88-1.5 in. ID Tubes

Patent 5,964,414 & 6,059,202

Clean:

- | | | |
|--------------------|--------------------------|--------------------------|
| Condenser Tubes | Evaporator Tubes | Reboiler Tubes |
| Precipitator Tubes | Catalyst Injection Tubes | Small Diameter Pipelines |
| Filtrate Lines | Cyclone Separator Lines | Reformer Tubes |
| Cooler Tubes | Process Sample Lines | Blowdown Lines |
| Fuel Lines | Furnace Tubes | Crystallizer Tubes |
| Lab Sewers | Centrifuge Feed Lines | Slurry Transfer Lines |



Marten Unplugger makes quick work of evaporator tubes

- Rotation speed controlled by viscous fluid governor
- Leak free high pressure seal
- Unplugger and Polisher style heads
- Disposable drilled jet heads
- Sealed, lubricated bearings
- Easy lubricant fill with syringe
- Easy field replacement of seal

Specifications

Model	Weasel	Ferret	Marten
Body Diameter	.66 in. 17 mm	0.91 in. 23 mm	1.25 in. 32 mm
For Tube OD	.88-1.5 in. 22-38 mm	1.1-2.0 in. 29-51 mm	1.5-3.0 in. 38-76 mm
Inlet Port	1/4 npt	1/4 npt	1/2 npt
Head Diameter	.625 in. 17 mm	.875 in. 22 mm	1.25 in. 32 mm
Length Overall	4.60 120 mm	5.60 in. 140 mm	6.75 in. 171 mm
Weight	0.7 lb 0.31 kg	1 lb 0.65 kg	1.5 lb 0.68 kg
Max. Pressure	15 Kpsi 1000 bar	15 Kpsi 1000 bar	15 Kpsi 1000 bar
Flow Capacity	8 gpm 30 l/min	12 gpm 45 l/min	25 gpm 95 l/min
Flow Rating	0.27 Cv	0.4 Cv	0.84 Cv
Rotation Speed	1,200 rpm	1,000 rpm	300-500 rpm

Weasel demonstrates its powerful unplugging capability



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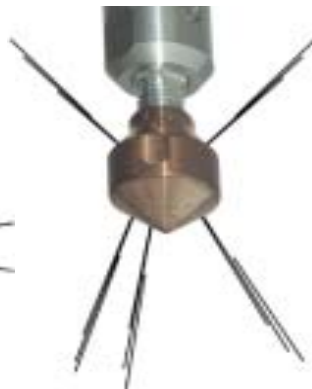
Unplugging jets penetrate, surround plugs, and grind away

The **Ferret** is shown here cleaning a plug out of a transparent plastic tube. Extensive testing proved what jet angles work best. Drilled jets in these heads provide the most economical life cycle cost, but they do wear out. Vigilant maintenance is required to get the best service from these tube nozzles.

Tube Nozzle Heads



Polisher Style



Unplugging Style



The most important maintenance need is periodic lubricant flush - every 10 hours for the **MT-P8**, 4 hours for the **FT-P4**, and 3 hours for the **EZ-P4**. Keeping the nozzle full of the special viscous fluid lubricant extends life of seals and bearings significantly.

See page 51 for a full list of maintenance kits and supplies available.

Specifications

Model	EZ 042	FT 042	MT 042
Jet Style	Polisher	Polisher	Polisher
Diameter, OD	5/8 in. 17 mm	7/8 in. 22 mm	1 in. 25 mm
Model	EZ 043	FT 043	MT 045
Jet Style	Unplugging	Unplugging	Unplugging
Diameter, OD	5/8 in. 17 mm	7/8 in. 22 mm	1-1/4 in. 32 mm
Jetting Options Available	10 Kpsi 690 bar 8 gpm 30 lpm	10 Kpsi 690 bar 10 gpm 38 lpm	10 Kpsi 690 bar 15 gpm 57 lpm
		10 Kpsi 690 bar 12 gpm 45 lpm	10 Kpsi 690 bar 20 gpm 76 lpm
			10 Kpsi 690 bar 25 gpm 95 lpm
	15 Kpsi 1030 bar 8 gpm 30 lpm	15 Kpsi 1030 bar 10 gpm 38 lpm	15 Kpsi 1030 bar 15 gpm 57 lpm
		15 Kpsi 1030 bar 12 gpm 45 lpm	15 Kpsi 1030 bar 20 gpm 76 lpm
			15 Kpsi 1030 bar 25 gpm 95 lpm

